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JOHN R. GARRETT
MARKISON & RECKAMP, P.C.
P.O. BOX 06229
WACKER DRIVE
CHICAGO,, IL 60606-0229

EXAMINER

LESPERANCE, JEAN E

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 08/28/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

GA

Office Action Summary

Application No.

09/182,911

Applicant(s)

WILKS, BARRY G.

Examiner

Jean E Lesperance

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6, 8, 10-18, 20-22, 24-26, 29, 35-37, 39 and 41-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-18 and 29 is/are allowed.
- 6) ☒ Claim(s) 4-6, 8, 10-12, 20-22, 24-26, 35-37, 39 and 41-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 4-6, 8, 10-18, 20-22, 24-26, 29, 35-37, 39, 41-48 are presented for examination.
2. The indicated allowability of claims 4-6, 8, 10-12, 20-22, 24-26, 35-37, 39, 41-48 are withdrawn and another office action is provided below.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, 8, 10-12, 20-22, 24-26, 35-37, 39, 41-48 are rejected under 35 U.S.C. 102 (b) as being unpatentable over U.S. Patent # 4,990,902 ("Zenda") in view of U.S. Patent # 6,067,071 ("Kotha et al.").

As for claims 4, 20, and 42, Zenda teaches a CRTC 13 receives a display timing signal parameter on system bus 3 in synchronism with display timing set command A supplied from CPU 1 through AND gate 15 (column 4, lines 11-14) corresponding to a) receiving capability parameters regarding a first display of the multiple displays; the display timing signal generating parameters can be changed in correspondence with different display modes resolutions (column 2,

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lines 66-68) corresponding to b) substituting selected display capabilities for the received capability parameters; and display resolution selecting means selects a display resolution (column 8, lines 43-44) corresponding to c) providing the selected display capabilities to an operating system; and then the power switch of the system is turned on, CPU 1 executes the display area control processing routine in BIOS 21 (column 4, lines 46-48) corresponding to wherein step (a) further comprises receiving the capability parameters in accordance with a system start-up. Accordingly, Zenda teaches all the claimed limitations as recited in claims 4, 5, and 20 with the exception of providing the capability parameters comprise display resolution and display pixel depth.

However, Kotha et al. teach two video signals having different refresh rates and resolutions (column 5, lines 25-26) corresponding to a display refresh rate.

It would have been obvious to utilize video signals with different refresh rate as taught by Kotha et al. in the display area control system disclosed by Zenda because this would allow the display controller to output at least one of a plurality of different graphics display resolutions to a fixed resolution panel display.

As for claims 6, 22, 26, 37, and 43, Zenda teaches The display timing parameters must correspondingly be changed when a display screen is changed (column 3, lines 11 and 12) corresponding to receiving the capability parameters in response to a monitor change process.

As for claims 8, 24, and 39, Zenda teaches a CPU Fig.1 (1) corresponding to a processing module; and ROM Fig.1 (5) corresponding to memory operably coupled to the processing

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module, wherein the memory includes operational instructions that cause the processing module to a CRTC 13 receives a display timing signal parameter on system bus 3 in synchronism with display timing set command a supplied from CPU 1 through AND gate 15 (column 4, lines 11-14) corresponding to a) receiving capability parameters regarding a first display of the multiple displays; the display timing signal generating parameters can be changed in correspondence with different display modes resolutions (column 2, lines 66-68) corresponding to b) substituting selected display capabilities for the received capability parameters; and display resolution selecting means selects a display resolution (column 8, lines 43-44) corresponding to c) providing the selected display capabilities to an operating system; a display area control system for displaying on a flat panel display apparatus applied data generated by a desired application program, the display apparatus having the capability to display data corresponding to a plurality of different display resolutions (column 7, 8-13) corresponding to operational instructions that cause the processing module to determine the selected display capabilities based on a composite of the display parameters of each multiple displays.

As for claims 10, 12, and 41, Zenda teaches When the power switch of the system is turned on, CPU 1 executes the display area control processing routine in BIOS 21 (column 4, lines 46-48) corresponding the memory further comprises operational instructions that causes the processing module to receive capability parameters in accordance with a system start-up and to monitor change process.

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As for claims 5, 11, 21, 25, and 36, Zenda teaches a display resolution selecting means selects a display resolution (column 8, lines 43-44) corresponding to providing the selected display capabilities to an operating system; a display mode set command is input at keyboard 23 during execution of the application program, CPU 1 supplies display mode set command A to one input terminal of AND gate 15 through system bus 3, and executes the display mode set routine in BIOS 21. If it is determined in step 41 that the display mode is not altered, the flow advances to step 55, and CPU 1 executes initialization including clearing of V-RAM 9 (column 5, lines 4-12) corresponding to identify the capability parameters as primary parameters.

As for claim 35, Kotha et al. teach the controller of the present invention uses a Discrete Time Oscillator (DTO) based clock divider and DCT based polyphase interpolation to upscale graphics display data from a first resolution to the panel resolution (abstract) corresponding to a display with a video graphic card. It is well known in the art to have a graphic display there must exist a video graphic card.

As for claims 44-48, Zenda teaches a display resolution selecting means selects a display resolution which differs from the display resolution corresponding to the designated set of display timing signal generating parameters, and when the predetermined number of picture elements in the horizontal direction of the selected display resolution is smaller than the maximum number of picture elements in the horizontal direction, said control means generates display timing signals so that non-display areas having picture elements which number $\frac{1}{2}$ a difference between the

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predetermined and maximum numbers of picture elements in the horizontal direction are formed on the right and left portions of the physical screen of the flat panel display apparatus (column 8, lines 58-68) corresponding to capability parameters that exceed the display parameters of each of the multiple displays. It means that the selected display capability parameters is twice the display parameters of each of the multiple displays.

Allowable Subject Matter

4. Claims 13-18 and 29 are allowed.

Reasons for Allowance

5. The following is a statement for indicating the allowable subject matter: the claimed invention is directed to a digital storage medium for storing operational instructions to support multiple displays. Claim 13 identifies a uniquely distinct feature “first storage means for storing operational instructions that cause the processing module to receive capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; second storage means for storing; operational instructions that cause the processing module to substitute selected display capabilities for the capability parameters; and third storage means for storing operational instructions that cause the processing module to provide the selected display capabilities to an operating system”.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kotha et al. teach a system and corresponding method for storing and presenting image data having a first pixel resolution on a single display having a fixed display resolution. The display resolution of the single display device is set by developers before implementation and stored in a control logic thereof. Zenda teaches a pixel area control system having a function of switching a display mode and inhibiting alteration of the switched display mode in a flat panel display apparatus is provided. When a screen of the selected display mode is smaller than a physical screen of the flat panel display apparatus, the screen is displayed at the center of the physical screen of the plasma display apparatus.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709 .

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

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(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive,
Arlington, VA, Sixth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

Jean Lesperance



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Date 8-9-2003



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600